Journal of Sedimentary Petrology

INDEX TO VOLUME 24

Aberdeen member ... 129
Abstracts of papers, 1953 annual meeting, Pacific Coast Section, Society of Economic Paleontologists and Mineralogists ... 143
Abstracts of papers, Twenty-eighth annual meeting, Society of Economic Paleontologists and Mineralogists. 128
A color test for distinguishing limestone and dolomite ... 282
A comparative study of Upper Chester and Lower Pennsylvanian stratigraphic variability, abstract ... 130
A Cretaceous vertebrate fauna of Minnesota and South Dakota, abstract ... 140
Alabamina wilcoxensis ... 145
Allen, V. T., cited ... 225, 233
Alling, H. L., cited ... 229, 233
Altamira shale ... 185
Altramira formation ... 168, 169
Ammobaculites ... 141
Ammobaculoides ... 141
A modified Kullenberg piston corer ... 207
Amphimorphina californica ... 145
Andersen, H. V., cited ... 77, 93, 99
Andrichuk, J. M., cited ... 3, 10, 19
A new teaching and research aid in sedimentation ... 117
Angulogerina semitrigonia (Galloway and Wissler) ... 188
Announcements ... 145, 286, 287
An occurrence of authigenic xenotime. 280
Anomalina ... 141
A paleoecological study of the Viesca member of the Weches formation, Smithville, Texas, abstract ... 142
Applegate, S. P., cited ... 275, 279
Applin, E. R., abstracts by ... 139, 142
Applin, P. L., abstracts by ... 139, 142
A quantitative lithofacies and biofacies study of the Florena shale (Permian) of Kansas, abstract ... 136
Aragonite tests among the Foraminifera ... 60
Arca ... 87
Arrhenius, G., abstract by ... 144
A seismic-reflection quality map of North America, abstract ... 134
A simple coring tube for soft sediments. 263
A simple coring tube for soft sediments, abstract ... 131
Astarte sp. ... 238
A technique for separting clay minerals from limestone ... 218
Atwater, G. I., cited ... 270, 274
Australia and California, Some guide foraminifera of the Upper Cretaceous and Lower Tertiary in, abstract ... 145
Authigenic xenotime, An occurrence of 280
Aves, C. A., cited ... 183
Aviculopecten ... 136
Ayres, E., cited ... 63, 66, 68

Balanus sp. ... 238
Balanus withersi (Pilsbry) ... 238
Bandy, O. L., article by ... 60
Bandy, O. L., cited ... 60, 61
Banks, J. E., cited ... 26
Barth, T. F. W., cited ... 233
Barth, T. F. W., review of book by ... 221
Bastin, E. S., cited ... 33, 36, 49
Bates, C. C., cited ... 82, 99
Beatie limestone ... 136
Belden formation ... 132
Benton group ... 140
Berg, R. R., cited ... 270, 271, 274
Berthois, L., cited ... 106, 115
Beu, K. E., cited ... 196
Bichowsky, F. R., cited ... 68
Bickam, W. D., cited ... 212, 217
Bigenerina ... 87
Bigenerina irregularis Phleger and Parker ... 60
Birch, F., abstract by ... 133
Birch, F., cited ... 63, 64, 68
Black, M., cited ... 227, 233
Black Creek formation ... 197, 199
Blackhawk formation ... 132
Blake, D. B., cited ... 27, 45
Bledsoe, A. O., cited ... 67, 68
Bloss, F. D., article by ... 252
Blum, H. F., cited ... 68
Bolivina acuminata Natland ... 186, 188
Bolivina advena var. *striatella* Cushman. 188
Bolivina argentea Cushman ... 189
Bolivina fossa ... 186
Bolivina girardensis ... 186
Bolivina hootsi ... 186
Bolivina pisiciformis ... 183, 186
Bolivina pisiciformis Galloway and Murray ... 189
Bolivina pseudoplicata Heron-Allen and Earland ... 188
Bolivina seminuda Cushman ... 189
Bolivina sinuata Galloway and Kissler. 189
Bolivina spissa ... 186
Bolivina spissa Cushman ... 189
Bolivina subadvena ... 186
Bolivina subadvena Cushman ... 189
Bolin, E. J., abstract by ... 140
Bond, G., article by ... 191
Book Cliffs of Eastern Utah, Facies development and intertonguing in the, abstract ... 129
Bornhauser, M., cited ... 216, 217
Bossier Formation ... 135

Brachycythere sp. 139
Bradley, W. F., article by 242
Bradley, W. F., cited 217, 244, 251
Bradley, W. H., cited 228, 233
Bramlette, M. N., cited 164, 168, 171, 181, 186, 190
Branson, E. B., cited 26
Branson, E. R., cited 26
Brazer formation 132
Brazilian Devonian carpoids, abstract 139
Bridgetown formation 235
Brindley, G. W., cited 196, 199, 244, 251, 273, 274
British West Indies, Calcium carbonate deposits of the Great Bahama Bank, abstract 138
Brown, B. E., cited 51, 59
Brown, C. Q., article by 196
Brown, W. F., cited 278, 279
Brooks, C. E. P., cited 217
Broussard, D. E., article by 207
Buddhue, J. D., cited 52, 58
Bulimina affinis d'Orbigny 189
Bulimina bradburyi 145
Bulimina cf. *B. inflatadas* 185
Bulimina cf. *B. inflatada* Seguenza 189
Bulimina excavata 145
Bulimina fossa Cushman and Parker 189
Bulimina marginata 187
Bulimina marginata d'Orbigny 188
Bulimina spinifera Cushman 189
Bulimina subacuminata R. E. and K. C. Stewart 189
Bulimina subcalva 183, 186
Bulimina subcalva Cushman and K. C. Stewart 189
Buliminella elegantissima 187
Buliminella elegantissima (d'Orbigny) 188
Buliminella subfusiformis Cushman 188
Burro Canyon formation 126
Butcher, W. S., cited 53, 54, 58, 175, 180

Cadigan, R. A., article by 123
Cailleux, A., cited 106, 115
Calcium carbonate deposits of the Great Bahama Bank, British West Indies, abstract 138
California, Eocene foraminifera from the Woodside district, San Mateo County, abstract 144
California, Lower Tertiary foraminiferal sequence, abstract 145
California sediments, Some characteristics of southern 50
California, Some guide foraminifera of the Upper Cretaceous and Lower Tertiary in Australia and, abstract 145
California, Some spectacular effects of wind erosion near Palm Springs, abstract 144
Calvert formation 238
Cancris auricula (Fichtel and Moll) 188
Candona sp. 139
Cardiopteris hirta White 132
Cardium 87
Carmel formation 126
Carozzi, A., review of book by 221
Carpenter, E. J., cited 51, 58
Carpoids, Brazilian Devonian, abstract 139
Cassidulina californica Cushman and Hughes 188
Cassidulina corbyi Cushman and Hughes 189
Cassidulina delicata Cushman 189
Cassidulina laevigata d'Orbigny 189
Cassidulina limbata Cushman and Hughes 188
Cassidulina lomitensis Galloway and Wissler 189
Cassidulina quadrata Cushman and Hughes 188
Cassidulina spiralis 187
Cassidulina spiralis Natland 189
Cassidulina tortuosa Cushman and Hughes 188
Cassidulina translucens Cushman and Hughes 189
Cassidulinoides cf. *C. bradyi* (Norman) 189
Caster, K. E., abstract by 139
Cemented sandstone slabs of the Chandeleur Islands, Louisiana 71
Ceratobulimina cretacea Cushman and Harris 60
Ceratobulimina stellata Bandy 60
Chandeleur Islands, Louisiana, Cemented sandstone slabs of the 71
Characteristics of southern California sediments, Some 50
Chave, K. E., cited 282
Chilostomella ovoidea Reuss 189
Chione 87
Chronic, J., abstract by 142
Cibicides 87
Cibicides aff. *C. pseudoungerianus* 188
Cibicides aff. *C. refulgens* Montfort 188
Cibicides cf. *C. basalobus* (Cushman) 188
Cibicides fletcheri Galloway and Wissler 188
Cibicides gallowayi Cushman and Valentine 188
Cibicides lobatus d'Orbigny 188
Cibicides mckannai Galloway and Wissler 189
"*Cibicides*" *repettoensis* 183
Cibicides spiralis Natland 189
Clarke, F. W., cited 60, 61
Classification of spores and pollen for paleontological correlation, abstract 143
Claussen, H. W., cited 196, 199
Clay minerals by diffraction methods, Quantitative estimation of 242
Clay minerals from limestone, A technique for separating 218
Clay minerals of the Neuse River sediments, The 196
Cleiothridina orbicularis (McChesney) 132
Clements, T., abstract by 144
Cline, L. M., abstract by 136
Cogen, W. M., cited 205, 206
Cohansey formation 240
Coleraine formation 141
Colomia californica Bandy 60, 61

Colomia californica var. *mundula* Bandy 60
Colorado, Paleozoic fossils in Cretaceous conglomerate from, abstract 142
Color test for distinguishing limestone and dolomite, A 282
Comparative study of Upper Chester and Lower Pennsylvanian stratigraphic variability, A, abstract 130
Composita ozarkana Mather 132
Conselman, F. B., abstract by 134
Conybeare, C. E. B., cited 252, 254
Coring tube for soft sediments, A simple 263
Coring tube for soft sediments, A simple, abstract 131
Correlation, Classification of spores and pollen for paleontologic, abstract 143
Correns, C. W., cited 233
Cotton Valley group 135
Cow Springs sandstone 126
Cravenoceras nevadense Miller and Furnish 132
Crepidula 87
Cretaceous vertebrate fauna of Minnesota and South Dakota, A, abstract 140
Cross, W., cited 229, 233
Crouch, R. W., article by 182
Crouch, R. W., cited 183, 185, 186, 187, 190
Curtis, D. M., abstract by 139
Curtis, N. M., Jr., abstract by 142
Cushman, J. A., cited 186, 190
Cutler formation 126
Cythereis 140
Cythereis echinata 139
Cythereis cf. *margaretifera* 139
Cytherella sp. 139
Cytherelloidea sp. 139
Cytheretta sp. 139
"*Cytheridea*" *sp.* 139
Cytherideis spp. 139
Cytheropteron sp. 139
Cytherura spp. 139

Dakota group 142
Dana, E. S., cited 281
Dana, S. W., cited 54, 55, 58
Dapples, E. C., abstract by 130
Dapples, E. C., cited 256, 257, 262
Davies, A. M., cited 216, 217
Davis, W. M., cited 275, 279
Dean, W. C., cited 51, 58
Decker, R. W., review by 290
Decorah formation 270
"Deep Sea Research," review of 147
DeFord, R. K., cited 229, 233
Dellwig, L. F., abstract by 129
Delmontian formation 190
Dentalina baggi Galloway and Wissler 188
Desulfovibrio desulfuricaus 141
Desulfovibrio sp. 141
Diagenesis of Pennsylvanian limestones, Upper Pecos Valley, New Mexico 255
Dictyoclostus cf. D. coloradoensis (Girty) 132
Diffraction methods, Quantitative estimations of clay minerals by 242
Dill, R. F., cited 55, 58
Discina lugubris (Conrad) 238
Discorbis spp. 188
Distribution of marine carbonate sediments, The, abstract 137
Distribution of marine Upper Jurassic ostracodes, western interior United States, abstract 141
Dockum group 256
Doeglas, D. J., cited 50, 58, 203, 206
Dolomite, Color test for distinguishing limestone and 282
Dripping Springs formation 280
Dryden, G., cited 241
Dryden, L., cited 206, 217, 241
Dubuque formation 270, 271, 272
Dunn, J. E., cited 51, 58
Dunnington, H. V., article by 27
Durham, J. W., cited 216, 217

Early diagenesis and lithification of carbonate sediments in south Florida, abstract 138
Eastern Interior Basin, Lower Pennsylvanian sediment sources of the, abstract 129
Easton, W. H., cited 52, 58
Edgell, S., abstract by 145
Edmundson, R. S., article by 275
Eggerella advena Cushman 188
Ehrenbergina bradyi 186
Elias, M. K., abstract by 142
"*Ellipsonodosaria*" *sagrinensis* 186
Elphidium 87
Elphidium articulatum d'Orbigny 188
Elphidium crispum 187
Elphidium crispum Linné 189
Elphidum poeyanum (d'Orbigny) 188
Elphidium spinatum Cushman and Valentine 188
Elphidium ssp. 187
Elphidium tumidum Natland 188
Emery, G. R., article by 207
Emery, K. O., abstract by 144
Emery, K. O., article by 50
Emery, K. O., cited 52, 53, 54, 55, 58, 162, 164, 165, 166, 169, 179, 180, 181, 185, 187, 190
Energy factor in sedimentation, The 62
Eocene foraminifera from the Woodside district, San Mateo County, California, abstract 144
Eponides frigidus var. *calidus* 187
Eponides frigidus var. *calidus* Cushman and Cole 188
Eponides healdi R. E. and K. C. Stewart 189
Eponides repandus Fichtel and Moll 188
Eponides subtenerus Galloway and Wissler 189
Eponides umbonatus (Reuss) 189
Eskola, P., cited 233
Eucrassatella melina (Conrad) 238
Evans, L. T., cited 162, 170, 180
Evans, P., cited 206
Evitt, W. R., II, cited 26

Exploratory developments of 1953, Significant, abstract ... 132
Exploratory drilling in 1953, abstract ... 132
Eymann, J. L., abstract ... 144
Eymann, J. L., cited ... 53, 58

Facies development and intertonguing in the Book Cliffs of eastern Utah, abstract ... 129
Facies mapping device, The tetrahedron as a ... 3
Facies patterns, Statistical analysis of, abstract ... 130
Fage, L., review of book edited by ... 147
Fairbridge, R. W., review by ... 147
Fasciolaria ... 87
Favella cf. *rugipunctata* ... 139
Fayetville formation ... 132
Feldspathized shales from Minnesota ... 132
Feray, D. E , cited ... 49, 252, 254
Fisk, H. N., abstract by ... 128
Fisk, H. N., article by ... 76
Fisk, H. N., cited ... 76, 78, 87, 91, 97, 99
Fleming, R. H., cited ... 165, 217
Florena shale ... 136, 137
Florida, Early diagenesis and lithification of carbonate sediments in south, abstract ... 138
Florida, Lithologic and faunal characteristics of Lower Cretaceous and Pre-Cretaceous (?) limestones of south peninsular, abstract ... 139
Folk, R. L., cited ... 65, 68
Foraminifera, Aragonite tests among the ... 60
Forgotson, F. B., Jr., abstract by ... 135
Frederickson, A. F., cited ... 65, 68
Fredonia oolite ... 138
Friedman, M., article by ... 235
Frondicularia advena Cushman ... 189

Galena formation ... 270, 271, 272
Galloway, J. J., cited ... 60, 61, 184, 186, 190
Garrels, R. M., cited ... 65, 66, 68
Garrison, L. E., cited ... 54, 55, 58
Gastil, G., note by ... 280
Gaudryina arenaria Galloway and Wissler ... 188
Genesis of pelagic sediments, abstract ... 144
Geologic framework of the Gulf Coastal Plain of Texas, abstract ... 133
Geology of San Pedro shelf, Submarine ... 162
Geothermal investigations, The present state of, abstract ... 133
Gilbert, C. M., cited ... 66, 68
Ginsburg, R. N., abstract by ... 138
Glanulina laevigata d'Orbigny ... 189
Globigerina ... 141
Globigerina ssp. ... 188
Globigerina washitensis Carsey ... 141
Globigerinella ... 141
Globobulimina pacifica Cushman ... 189
Globorotalia ... 87
"*Globorotalia*" *companulata* Galloway and Wissler ... 189
Globotruncana ... 183
Glorieta member ... 256
Goddard, E. N., cited ... 166, 180
Goldich, S. S., cited ... 270, 274
Gorsline, D. S., cited ... 53, 54, 58
Gösella flinti Cushman ... 188
Gott, P. F., cited ... 26
Gould, H. R., cited ... 52, 53, 54, 58, 175, 180
Graf, cited ... 214
Graham, E. R., cited ... 65, 68
Graham, J. J., abstract by ... 144
Grain-size analysis of sandstones and siltstones, Testing graphical methods of ... 123
Graneros formation ... 140
Graphical methods of grain-size analysis of sandstones and siltstones, Testing ... 123
Graphite in the Cretaceous of southern Illinois ... 219
Gray, H. B., cited ... 186, 190
Great Bahama Bank, British West Indies, Calcium carbonate deposits of the, abstract ... 138
Great Plains region, Introduction to the oil and gas geology of the, abstract ... 133
Green River formation ... 279
Grim, R. E., article by ... 242
Grim, R. E., cited ... 67, 68, 206
Group, F. F., cited ... 227, 233
Gruner, J. W., cited ... 270, 274
Gulf Coastal Plain of Texas, Geological framework of the, abstract ... 133
Gumbelina ... 141, 183
Gyroidina altiformis R. E. and K. C. Stewart ... 189
Gyroidina rotundimargo R. E. and K. C. Stewart ... 189

Halicyne ... 136
Hagner, A. R., review by ... 221
Handin, J. W., cited ... 52, 53, 58
Hanna, M. A., abstract by ... 131
Hanna, M. A., article by ... 263
Haplophragmoides ... 141
Haplophragmoides adverum Cushman ... 188
Haplophragmoides planissimum Cushman ... 188
Harbison, A., cited ... 235, 238, 241
Harrison, F. W., cited ... 244, 251
Hatch, F. H., cited ... 227, 233
Hawkins, A. C., cited ... 275, 279
Hayes, W. H., cited ... 235, 241
Hayman, R. J., cited ... 206
Heavy minerals of the Jacksonian sediments of Mississippi and adjacent areas ... 200
Hedberg, G. D., cited ... 67, 68
Hemicythere sp. ... 136
Hendricks, S. B., cited ... 273, 274
Heritch, H., cited ... 26
Hilgard, E. W., cited ... 93, 99
Höglundia elegans (d'Orbigny) ... 60, 61, 189
Höglundia supracretacea (ten Dam) ... 60
Holle, C. G., cited ... 78, 80, 93, 98, 99
Holzman, J. E., cited ... 54, 58

Hooks, W. G., cited....196, 199
Hornerstown formation....212, 213, 216, 217
Hornerstown "marl"....237
Horrer, P. L., cited....181
Höverman, J., cited....106, 115
Howard, C. S. cited....53, 58
Hudson, G. G., cited....26
Huggins, M. L., cited....64, 68
Hughes, R. J., Jr., article by....20
Hunter, R. J., Jr., article by....20
Hunter, R. C., cited....52, 58
Hussey, K. M., cited....60, 61

Ichthyodectes....140
Iddings, J. P., cited....229, 233
Illinois, Graphite in the Cretaceous of southern....219
Imbrie, J., abstract by....136
Ingalls, P. C., abstract by....132
Ingram, R. L., article by....196
Ingram, R. L., cited....196, 199
Inman, D. L., cited....53, 58, 103, 116, 123, 127
Introduction to the oil and gas geology of the Great Plains region, abstract 133
Isolation and cultivation of micro-organisms from deep well borings in the Williston Basin, The, abstract. 141

Jacobson, L., abstract by....131
Jacksonian sediments....200, 203, 204, 205
Jacksonian sediments of Mississippi and adjacent areas, Heavy minerals of 200
Johns, W. D., article by....242
Johnson, J. W., cited....286, 287
Johnson, M. E., cited....236, 237, 241
Johnson, M. W., cited....217
Jones, D. J., abstract by....140
Jones, D. W., article by....117

Kalahari sands....191, 192, 193
Kalkowsky, E., cited....229, 233
Kansas, A quantitative lithofacies and biofacies study of the Florena shale (Permian) of, abstract....136
Karreriella milleri....183
Karreriella milleri Natland....189
Keller, W. D., article by....62
Keller, W. D., cited....64, 67, 68, 262
Kew, W. S., cited. 164, 168, 171, 181, 186, 190
Kier, C. F., Jr., cited....235, 241
Kindle, C. H., cited....275, 279
Kinsman, B., cited....283, 285
Kirkwood formation....235, 236, 237, 238, 239, 240, 241
Kleinpell, R. M., cited....185, 190
Knapp, G. N., cited....212, 217, 235, 241
Knopf, A., cited....227, 232, 234
Kocher, A. E., cited....51, 58
Kolb, C. R., article by....76
Kreyenhagen shale....144
Krithe aff. *partonensis*....139
Krumbein, W. C., abstract by....130
Krumbein, W. C., article by....3
Krumbein, W. C., cited. 3, 10, 19, 65, 66, 68, 105, 110, 116, 123, 127, 155, 158, 159, 161, 177, 181, 206, 227, 233, 256, 257, 262, 279
Krynine, P. D., cited....240, 241, 275, 277, 278, 279
Kuenen, Ph. H., cited....26, 190
Kullenberg piston corer, A modified... 207
Kulp, J. L., abstract by....131
Labrospira columbiense var. *evolutum* Cushman and McColloch....188
Lagens spp.....188
Lahee, F. H., abstract by....132
Lamarckina claibornensis Cushman....60, 61
Lamar, J. E., cited....122, 214
Lane, E. W., cited....229, 233
Late-Mississippian-Early Pennsylvanian of southern midcontinent, abstract....142
Lea, J. W., abstract by....133
Lee, W., abstract by....134
LeMaire, G., cited....26
Leptocythere sp.....139
Levinson, A. A., cited....272, 273, 274
Light, M., cited....215
Limestone and related rocks, Terminology of....225
Limestone, color test for distinguishing dolomite and....282
Limestone in the Triassic of Virginia, Oolitic....275
Limestones, Diagenesis of Pennsylvanian....255
Link, Theo. A., abstract by....133
"Literature of Geology, The," review of 147
Lithologic and faunal characteristics of Lower Cretaceous and pre-Cretaceous (?) limestones of south peninsular Florida, abstract....139
Lithologic features of cores of Jurassic limestone from a deep well in south Mississippi, abstract....142
Lloyd, R. M., note by....218
Lomita marl....187
Lone Grove series....131
Louisiana, Cemented sandstone slabs of the Chandeleur Islands....71
Lower Dubuque feldspathized shales... 271
Lower Pennsylvanian sediment sources of the eastern interior basin, abstract....129
Low, J., cited....79
Lowman, S. W., cited....89, 99
Loxoconcha spp.....139
Loxostoma....141
Lyell, C., cited....234
Lyons, P. L., abstract by....134

MacDonald, G. A., cited....54, 59
MacEwan, D. M. C., cited....246, 251
McCaleb, cited....197
McConnell, D., cited....272, 273, 274
McFarlan, E., Jr., article by....76
McFarland, P. W., abstract by....133
McKee, E. D., abstract by....136
McOwatt, H. W., cited....162
Maarleveld, G., article by....100
Macrocytherina sp.....139

Madera formation....256, 257, 259
Magdelena group....256
Majeed, M. A., cited....206
Malaga mudstone....185
Malloy, V. S., abstract by....145
Manasquan formation....216
Manassas formation....275
Mancos shale....129
Mann, J. F., Jr., abstract by....144
Mann, J. F., Jr., cited....52, 58
Manning Canyon shale....132
Marginulina....87
Marshall, C. E., cited....65, 68
Mason, B., review of book by....147
Mehl, M. G., cited....26
Melton, F. A., cited....26
Merriam, P., cited....53, 58
Mertie, J. B., cited....4, 9, 19
Methods, diffraction....242
Miami oolite....138
Michigan, The process of deposition of the Salina salt of, abstract....129
Microcythere sp.....139
Microstylolites in a rhyolite porphyry. 252
Miller, R. L., abstract by....137
Millot, G., review by....221
Milner, H. B., cited....206
Minnesota and South Dakota, A Cretaceous vertebrate fauna of, abstract....140
Minnesota, Feldspathized shales from.. 270
Minnesota, Some foraminifera, radiolaria, and ostracoda from the Cretaceous of, abstract....140
Miocene orthoquartzite from New Jersey....235
Mississippi and adjacent areas, Heavy minerals of the Jackson sediments of....200
Mississippi area, Recent ostracod biofacies in east, abstract....139
Mississippi delta, Sedimentary framework of the modern....76
Mississippi, Lithologic features of cores of Jurassic limestone from a deep well in south, abstract....142
Mississippian carbonate deposits of the Ozark region, abstract....138
Mississippian-Pennsylvanian boundary in northeastern Utah, abstract....132
Modified Kullenberg piston corer, A... 207
Moenkopi formation....136
Monterey formation....185
Moore, D. G., abstract by....140
Moore, D. G., article by....162
Moore, D. G., cited....54, 58, 82, 99, 190
Moore, R. C., abstract by....138
Morgan formation....132
Morgan, J. P., article by....71
Morgan, J. P., cited....77, 95, 99
Morrison formation....124, 126, 142
Mulinia....87
Muller, J., cited....100, 116
Mundorff, M. J., cited....199
Murray, G. E., cited....206
Natica....87
Native sulfur in the Gulf Coast salt domes, The origin of, abstract....131
Natland, M. L., cited....183, 186, 190
Nelson, J. M., abstract by....141
Nelson, J. W., cited....51, 58
Neobulimina....141
Neospirifir aff. *N. cameratus* (Morton). 132
Neuse River sediments, The clay minerals of the....196
Newell, N. D., abstract by....138
New Jersey, Miocene orthoquartzite from....235
New Mexico, Diagenesis of Pennsylvanian limestone, Upper Pecos Valley. 255
New teaching and research aid in sedimentation....117
Niobrara formation....141
Nobles, R. H., cited....52, 59
Nodogenerina advena Cushman and Laiming....189
Nodogenerina lepidula (Schwager)....189
Nodosarella vernuelei d'Orbigny var.... 189
Nodosaria tosta Schwager....189
Nomenclature based on sand-silt-clay ratios....151
Nonion....87
Nonion barleeanum (Williamson)....189
Nonionella....87
Nonionella basespinata....187
Nonionella basespinata Cushman and Moyer....188
Nonionella japonica var. *mexicana* Cushman and McColloch....188
Nonionella miocenica var. *stella*....187
Nonionella miocenica var. *stella* Cushman and Moyer....188
Nonion pompiloides....184, 185
Nonion pompiloides (Fichtel and Moll) 189
Non-marine frontier microfauna, Coalville area, Utah, abstract....140
Norem, W. L., abstract by....143
Nuculana....87
Nuculana proxima (Say)....238

O'Brien, M. P., cited....181
Occurrence of authigenic xenotime, An. 280
Oil and gas geology of the Great Plains region, Introduction to the, abstract....133
Oil and gas production from carbonate reservoirs, abstract....134
Oklahoma, Sedimentary characteristics of producing zones in west Brock area, Carter County, abstract....130
Olivella....87
Olson, E. C., abstract by....137
O'Neil, T., cited....84, 99
Oolitic limestone in the Triassic of Virginia....275
Oquirrh formation....132
Orbulina universa d'Orbigny....188
Origin of native sulfur in the Gulf Coast salt domes, The, abstract....131
Orthoquartzite, Miocene....235

Ostrea percrassa (Conrad) 238
Ostrea virginica (Gmelin) 238
Otto, G. H., cited 123, 127, 206
Ozark region, Mississippian carbonate deposits of the, abstract 138

Paleoecological study of the Viesca member of the Weches formation, Smithville, Texas, A, abstract 142
Paleoecology of the San Pedro shelf and vicinity, Paleontology and 182
Paleontology and paleoecology of the San Pedro shelf and vicinity 182
Paleozoic fossils in Cretaceous conglomerates from Colorado, abstract 142
Parker, F. L., cited 212, 217
Patnode, H. W., cited 55, 59
Payne, T. G., cited 230, 234
Pecten madisonius (Say) 238
Pelagic sediments, genesis of, abstract. 144
Pellucistoma sp. 139
Pennsylvanian limestones, Diagenesis of 255
Perissocytheridea spp. 139
Peterson, J. A., abstract by 141
Peterson, J., cited 212, 217
"Pétrographie des roches sedimentaires," review of 221
Petrology of Springer oil bearing sandstones, abstract 131
Petrology of the Vincetown formation, The 213
Pettijohn, F. J., cited ..3, 19, 105, 116, 123, 127, 167, 177, 181, 191, 195, 206, 215, 217, ... 227, 233, 252, 253, 254
Phacoides 87
Phalium 87
Phleger, F. B., abstract by 135
Phleger, F. B., cited 190
Photomicro-stereographs as an aid in interpreting textures and structures 20
Pirsson, L. V., cited 227, 229, 233, 234
Piston corer, A modified Kullenberg ... 207
Plectofrondicularia californica 186
Plectofrondicularia californica Cushman 189
Plectofrondicularia kerni 145
Planulina 141
Planulina sp. 188
Planulina ornata d'Orbigny 189
Platteville formation 270
Polinices 87
Pollen for paleontological correlation, Classification of spores and, abstract 143
Polymorphina charlottensis Cushman ... 188
Ponta Grossa shale 139
Poster, H., cited 106, 115
Post-glacial stratigraphy along the central Texas coast, abstract 140
Potter, P. E., abstracts by 129, 130
Pouquet, J., cited 106, 116
Powers, M. C., cited 197, 199, 283, 285
Present state of geothermal investigations, The, abstract 133
"Principles of Geomorphology," review of 290
Process of deposition of the Salina salt of Michigan, The, abstract 129
Prokopovich, N., cited ... 33, 35, 37, 38, 43, 49
Prosser limestone 271
Proteonina difflugiformis (H. B. Brady). 188
Pseudobulimina glaessneri Howe and Roberts 60
Pseudoparrella pacifica Cushman 189
Pseudoparella subperuviana (Cushman). 189
Pseudopolymorphina doani Galloway and Wissler 188
Pterygocythereis sp. 139
Pullenia bulloides 185
Pullenia bulloides (d'Orbigny) 189
Pullenia quinqueloba (Reuss) 189
Putnam, J. A., cited 284, 285
Pye, W. D., abstract by 141
Pyrgo spp. 188

Quantitative estimations of clay minerals by diffraction methods 242
Quantitative lithofacies and biofacies study of the Florena shale (Permian) of Kansas, A, abstract 136
Quinqueloculina 87
Quinqueloculina spp. 188
Quinqueloculina claiborniana 143

Ramberg, H., cited 64, 68
Ramsden, R. M., cited 46, 49
Ramsden, R. M., note by 282
Rastall, R. H., cited 227, 233
Recent ostracod biofacies in east Mississippi area, abstract 139
Recognition of playa sediments in the geologic column, abstract 144
Regional stratigraphic analysis of the Cotten Valley group of the Upper Gulf Coastal Plain, abstract 135
Reiche, P., cited 63, 68
Relationship between fauna and lithology in the Moenkopi formation, abstract 136
Relationships of invertebrate organisms in Pennsylvanian strata, abstract. 136
Reophax excentricus Cushman 188
Reophax scotti Chaster 188
Reophax subfusiformis Earland 188
Repetto formation 187, 190
Research aid in sedimentation, A new teaching and 117
Revelle, R. R., cited ..53, 56, 59, 162, 170, 181
Rhipidomella nevadensis (Meek) 132
Rhyolite porphyry, Microstylolites in .. 252
Rice, C. M., cited 159, 161
Richards, H. G., cited ..212, 217, 235, 238, 241
Richter, R. C., cited 171, 181
Rierdon formation 141
Rigby, J. K., abstract by 138
Rittenberg, S. C., cited 55, 58, 185, 190
Rittenhouse, R., cited 120, 122
Robertina charlottensis (Cushman) 188
Roberts, J. K., cited 275, 278, 279
Robinson, G. W., cited 153, 158

Robulus 87
Robulus spp. 189
Rodgers, J., abstract by 137
Rodgers, J., article by 225
Rogers, H., cited 212, 217
Rosenbusch, H., cited 270, 274
Ross, C. S., cited 26, 273, 274
Rossini, F. D., cited 68
Rotalia 87
Rotalia garveyensis Natland 185, 189
Roundness and shape of marine gravels from Urk (Netherlands), a comparison of several methods of investigation 100
Roy, C. J., cited 27, 45, 49
Rubey, W. W., cited 206
Rusnak, G. A., discussion by 283
Russell, R. D., cited 76, 77, 99
Russell, R. J., cited 71, 75, 76, 77, 93, 94, 99
Ryan, J. D., cited 283, 285

Sadlick, W., abstract by 132
Salina salt of Michigan, The process of Deposition of the, abstract 129
Salisbury, R. D., cited 235, 241
Salt domes, The origin of native sulfur in the Gulf Coast, abstracts 131
Sample-population concepts in faunal-lithologic facies studies, abstract 137
San Andres formation 256
Sander, B., cited 232, 234
Sandia formation 256, 257
Sand grains from the Victoria Falls area, Surface textures of 191
Sand-silt-clay ratios, Nomenclature based on 151
Sangre de Cristo formation 256
San Pedro shelf, Submarine geology of 162
San Pedro shelf and vicinity, Paleontology and paleoecology of the 182
Santa Rosa formation 256
Sawin, H. J., cited 26
Scarlott, C. A., cited 63, 66, 68
Scruton, P. C., cited 82, 99
Schaeffer, R., cited 106, 116
Schairer, J. F., cited 68
Schlanger, S. O., article by 212
Schmidt, R. A. M., cited 26
Schoff, S. L., cited 276, 279
Schreiner, O., cited 51, 59
Schuyler formation 135
Sedimentary characteristics of producing zones in west Brock area, Carter County, Oklahoma, abstract 130
Sedimentary framework of the modern Mississippi delta 76
Sedimentation, Energy Factor in 62
Sedimentation phenomena in a mountainous source area, abstract 130
Sediments, Accumulation of shells in 283
Sediments of Mississippi and adjacent areas, Heavy minerals of the Jacksonian 200
Sediments, The clay minerals of the Neuse River 196
Seismic reflection quality map of North America, A, abstract 134
S.E.P.M. looks ahead, The, abstract 128
Shales, Feldspathized from Minnesota 270
Sharp, R. P., cited 52, 59
Shaub, B. M., cited 27, 28, 29, 30, 31, 32, 35, 37, 38, 41, 49
Shaw, E. W., cited 93, 99
Shells in sediments, Accumulation of 283
Shepard, F. P., abstract by 140
Shepard, F. P., article by 151
Shepard, F. P., cited 53, 54, 58, 59, 162, 164, 165, 166, 180, 181
Shiloh "marl" 235
Shrock, R. P., cited 49
Shrode, R. S., note by 219
Sidwell, R., article by 255
Sidwell, R., cited 257, 262
Siever, R., abstracts by 129, 130
Sigmomorphina frondicularifornis Galloway and Wissler 189
Sigmomorphina trilocularis (Bagg) 189
Significant exploratory developments of 1953, abstract 132
Silicosignoilina californica 145
Silverman, M., cited 207, 208, 211, 283, 285
Simple coring tube for soft sediments, A 263
Simple coring tube for soft sediments, A, abstract 131
Simpson, G. G., cited 26
Siphonina claibornensis 143
Size distribution of gravels, abstract 144
Sloan, R. E., abstract by 140
Sloss, L. L., abstract by 130
Sloss, L. L., cited 10, 19, 49, 155, 158, 159, 161, 223, 227, 252, 254, 256, 257, 262, 279
Snedecor, G. W., cited 124, 127
Some characteristics of southern California sediments 50
Some foraminifera, radiolaria, and ostracoda from the Cretaceous of Minnesota, abstract 140
Some guide foraminifera of the Upper Cretaceous and Lower Tertiary in Australia and California, abstract 145
Some modern faunal and lithologic associations, abstract 135
Some remarks on the accumulation of shells in sediments 283
Some spectacular effects of wind erosion near Palm Springs, California, abstract 144
Sorting nomenclatural assortment 159
South Dakota, A Cretaceous vertebrate fauna of Minnesota and, abstract 140
Southern California sediments, Some characteristics of 50
Southern midcontinent, Late Mississippian-Early Pennsylvanian of, abstract 142
Spangler, W., cited 212, 217
Spicer, H. C., cited 68
Spirifir rockymontanus-opimus-matheri-occidentalis 132

Spores and pollen for paleontologic correlation, classification of, abstract. 144
Spring Canyon coal 129
Springer formation 131
Springer oil bearing sandstones, Petrology of, abstract 131
Star Point formation 129
Statistical analysis of facies patterns, abstract 130
Stevenson, R. E., cited 53, 59
Stewartville member 271, 272
Stockdale, P. B., cited 27, 28, 33, 34, 35, 36, 37, 38, 43, 44, 46, 252, 254
Stone, R. O., abstracts of 144
Stone, R. O., cited 52, 59
Storie, R. E., cited 51, 52, 53, 58
Strahorn, A. T., cited 51, 58
Structures, Photomicro-stereographs as as aid in interpreting textures and 20
Stylolite development post-dates rock induration 27
Submarine geology of San Pedro shelf 162
Summerville formation 126
Sun, Kuan-Han, cited 64, 68
Sun, Ming-Shan, article by 200
Surface textures of sand grains from the Victoria Falls area 191
Sverdrup, H. V., cited 165, 181, 217
Swift formation 141
Sykes, G., cited 53, 59
Symposium on faunal facies and their lithologic associations, abstracts 135
Symposium on regional aspects of carbonate deposition, abstracts 137

Takasaki, K. J., cited 54, 55, 58
Tarr, W. A., cited 225, 234, 239, 241
Teaching and research aid in sedimentation, A new 117
Technique for separating clay minerals from limestone, A 218
Terminology of limestone and related rocks: an interim report 225
Tester, A. C., cited 270, 274
Testing graphical methods of grain-size analysis of sandstones and siltstones 123
Tetrahedron as a facies mapping device, The 3
Texas, A paleoecological study of the Viesca member of the Weches formation, Smithville, abstract 142
Texas coast, Post-glacial stratigraphy along the central, abstract 140
Texas, Geologic framework of the Gulf Coastal Plain of, abstract 133
Textularia 87
Textularia schencki Cushman and Valentine 189
Textures and structures, Photomicro-stereographs as an aid in interpreting 20
Textures of sand grains from the Victoria Falls area, Surface 191
The clay minerals of the Neuse River sediments 196
The distribution of marine carbonate sediments, abstract 137
The energy factor in sedimentation 62
The isolation and cultivation of microorganisms from deep well borings in the Williston Basin, abstract 141
"The literature of geology," review of 147
"Theoretical petrology," review of 221
The origin of native sulfur in the Gulf Coast salt domes, abstract 131
The Petrology of the Vincetown formation 212
The present state of geothermal investigations, abstract 133
The process of deposition of the Salina salt of Michigan, abstract 129
The S.E.P.M. looks ahead, abstract 128
The tetrahedron as a facies mapping device 3
Thickness maps as criteria for regional structural movements, abstract 134
Thiel, G. A., cited 270, 274
Thornbury, W. D., review of book by 290
Threet, R. L., article by 162
Timms Point Formation 171, 176, 182, 186, 187, 190
Timms Point silt 186
Trachyleberis cf. *exanthemata* 139
Treadwell, R. C., article by 71
Trefethen, J. M., cited 152, 154, 158, 160, 161
Trask, P. D., cited 50, 55, 57, 59, 159, 181
Triassic, Oolitic limestones in the 275
Tricart, J., cited 106, 116
Trocamina pacifica 187, 189
Trochammina 141
Trowbridge, A. C., cited 77, 78, 91, 99
Turritella cumberlandia (Conrad) 238
Turner, F. J., cited 66, 68
Tuscaloosa formation 197
Twelhofel, W. H., cited 225, 227, 234

Uchupi, E., cited 54, 59
Udden, J. A., cited 50, 59, 65, 68
Upper Chester limestone 130
Upper Chester sandstone 130
Upper Dubuque feldspathized shale 271
Upper Karroo basalts 192
Urk (Netherlands), Roundness and shape of marine gravels from 100
U. S. Corps of Engineers, cited 78, 80, 81, 89
Utah, facies development intertonguing in the Book Cliffs of eastern, abstract 129
Utah, Mississippian-Pennsylvanian boundary in northeastern, abstract 132
Utah, non-marine frontier micro-fauna, Coalville area, abstract 140
Uvigerina 87
Uvigerina garzaensis 145
Uvigerina hootsi 186
Uvigerina hootsi Rankin 185, 189
Uvigerina peregrina Cushman 189
Uvigerina proboscidea Schwager 189
Uvigerina senticosa Cushman 189
Uvigerina subperegrina 186

Valmonte diatomite 185
Valvulineria araucana d'Orbigny 189
Valvulineria wilcoxensis 145
Van Andel, Tj. H., article by 100
Van Hise, C. R., cited 67, 68
Van Raadshoven, B., cited 100, 116
Van Tine, A. B., cited 48, 49
Van Veen, J., cited 116
Victoria Falls area, Surface textures of sand grains from 191
Viesca member 142
Vincetown formation 212, 213, 214, 215, 216, 217
Vincetown formation, The Petrology of the 212
Virginia, Oolitic limestone in the Triassic of 275
Virgulina cornuta Cushman 189
Virgulina nodosa 186
Virgulina nodosa R. E. and K. C. Stewart 189

Waard, D. De, cited 100, 102, 103, 104, 116
Wade, F. A., abstract by 130
Wadell, H., cited 105, 116
Wagner, G., cited 34, 49
Waldschmidt, W. A., cited 46, 49
Warn, G. F., article by 255
Warn, G. F., cited 257, 262
Washington, H. S., cited 230, 233
Waters, J. A., abstract by 133
Watson, E. B., cited 51, 58
Weaver, C. E., cited 274
Weches formation 142
Weiss, M. P., article by 270
Weiss, M. P., cited 270, 271, 274
Wellerella osagensis (Swallow) 132
Wentworth, C. K., cited 50, 59, 116, 225, 234
Wescott, J. F. 67, 68
Western Interior United States, Distribution of Marine Upper Jurassic Ostracodes 141
Whaley, R. C., cited 207, 208, 211, 283, 285
Wheeler, W. C., cited 60, 61
White, C. M., cited 284, 285
White, G. W., review by 147
Wiggers, A. J., article by 100
Wilbert, L. J., Jr., article by 76
Wilbert, L. J., Jr., cited 206
Williams, H., cited 66, 68, 225, 234
Williams, J. M., abstract by 141
Williston Basin, The isolation and cultivation of micro-organisms from deep well borings in the, abstract 141
Wind erosion near Palm Springs, California, Some spectacular effects of, abstract 144
Winterburn, R., cited 172, 181
Winterkorn, H., cited 160, 161
Wissler, S. G., cited 184, 186, 190
Wood, W. A., cited 60, 61
Woodford, A. O., cited 169, 181
Woodring, W. P., cited 164, 168, 171, 181, 186, 190

Xenotime, An occurrence of authigenic 280

Yeso formation 256
Young, R. G., abstract by 129
Young, R. S., article by 275

Zambezi sands 192, 193, 194
Zingg, T., cited 105, 116
Zinn, C. J., cited 65, 68
Zobell, C. E., cited 65, 68